<u>IN THE CLAIMS</u>:

Please **AMEND** claim 1 as follows.

1.   (Currently Amended) An injection molding machine, comprising:

a cylinder member;

an injection member disposed in the cylinder member such that the injection member can advance and retreat;

a plurality of heaters disposed on the outer circumference of the cylinder member;

temperature detection sections disposed on the cylinder member at a plurality of positions along an axial direction thereof so as to detect temperature;

a recording device which stores a recorded target temperature distribution range indicating an optimal temperature range at each position of the cylinder member; and

a control section ~~for adjusting~~<u>which adjusts</u> set temperatures of the heaters such that each of the temperatures detected by the temperature detection sections falls within the target temperature distribution range.

2.   (Previously Presented) An injection molding machine according to claim 1, further comprising:

a cooling apparatus disposed at a supply port of the cylinder member to which a molding material is supplied and adapted to cool the cylinder member,

wherein the control section adjusts a set temperature of a cooling medium of the cooling apparatus such that the temperatures detected by the temperature detection sections fall within the target temperature distribution range.

3. (Previously Presented) An injection molding machine according to claim 1, wherein the temperature detection sections include a plurality of heater temperature sensors disposed in the vicinity of the respective heaters, and a molding-material temperature sensor disposed on a side toward a supply port of the cylinder member to which a molding material is supplied.

4. (Previously Presented) An injection molding machine according to claim 1, wherein the control section adjusts the set temperatures of the respective heaters on the basis of mainly the temperature detected by the molding-material temperature sensor.

5. (Original) An injection molding machine according to claim 4, wherein the control section calculates a required heat amount on the basis of a difference between the temperature detected by the molding-material temperature sensor and each target temperature of the target temperature distribution range recorded on the recording device, and adjusts the set temperatures of the respective heaters in accordance with the calculated heat amount.

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6.   (Previously Presented) An injection molding method, comprising:

detecting a plurality of temperatures of a cylinder member by use of temperature detection sections disposed on the cylinder member at a plurality of positions along an axial direction thereof;

reading from a recording device a target temperature distribution range indicating an optimal temperature range at each position of the cylinder member; and

adjusting set temperatures of a plurality of heaters disposed on the outer circumference of the cylinder member such that each of the temperatures detected by the temperature detection sections falls within the target temperature distribution range.

7.   (Previously Presented) An injection molding method according to claim 6, wherein the detecting comprises detecting the plurality of temperatures by a plurality of heater temperature sensors disposed in the vicinity of the plurality of heaters, and a molding-material temperature sensor disposed on a side toward a supply port of the cylinder member to which a molding material is supplied.

8.   (Previously Presented) An injection molding method according to claim 7, wherein the adjusting comprises adjusting the set temperatures of the plurality of heaters on the basis of mainly the temperature detected by the molding-material temperature sensor.

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